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*Research Article***Description Data Completeness in Maternal & Child Health (MCH) Handbook in Temanggung Regency***Yudhy Dharmawan<sup>a</sup>*<sup>a</sup> Public Health Faculty, Diponegoro University, Indonesia. Corresponding author : yudhydharmawan@gmail.com

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**Abstract**

**Background:** Maternal mortality rate in Central Java in 2015 was still high, at 111 / 100,000 live births. Therefore developed a method for early detection of the cause of death in “Desa Siaga” Program. In this program include a community-based surveillance. Sources of primary data recording surveillance activities are MCH handbook. Therefore it needs to know how the completeness of MCH handbook as a basis for the development of surveillance system in the village

**Method:** Data collection techniques using observations with the checklist instrument to describe data completeness MCH handbook. Population study is MCH handbook what owned by Mothers who have children under five. Samples were MCH handbook in 31 villages with category Active “Desa Siaga” in the working area three health centers in the district of Temanggung.

**Results:** The average of data completeness in MCH Handbook was 45.29%. For 13 MCH Handbook section was observed, there are only 3 parts completeness above 50%, Ten other parts percentage is less than 50%.

**Conclusion:** There are many data that useful for screening high risk pregnant woman and nutrition growth are incomplete. Incomplete data in MCH Data shown that data is not be urgent in MCH Services. Data in MCH Handbook couldn't be database for MCH Surveillance in “Desa Siaga” Program

**Keywords :** Data Completeness, MCH Handbook

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**Background**

Maternal mortality rate in Central Java in 2015 was still high, at 111 / 100,000 live births. According to the results Basic Health Survey ( Riskesdas) 2013 direct causes of maternal mortality, infant and toddler was can be prevented if it can be detected early<sup>1</sup>.

Therefore developed a method for early detection of the cause of death in “Desa Siaga” Program. In this program include a community-based surveillance, such as recording and reporting on the health of mother and child from the cadre and village midwife to provide information and an

overview of the health problems of mother and child in the village <sup>2</sup>.

When the data recording is done in a complete and timely delivery can describe the health status of mothers and children, so that any problems occur can be detected as early as possible and get a good health care services. <sup>3</sup>

Sources of primary data recording surveillance activities are MCH handbook which then became the basis of data in the recording and reporting of MCH Local Area Monitoring. <sup>4</sup>

Therefore it needs to know how the completeness of MCH handbook as a basis for the development of surveillance system in the village in order to prevent maternal and infant mortality and improve mother and child nutrition status.

## Methods

Data collection techniques using observations with the checklist instrument to describe data completeness MCH handbook. Population study is MCH handbook what owned by Mothers who have children under five.

Each village was taken 1 MCH Handbook which are expected to represent the characteristics of the village. This study has received Ethical Clearance from the ethics committee Faculty of Public Health Diponegoro University

## Results

This research was conducted in three health centers in the district of Temanggung. They are Puskesmas ( Health Center ) Pringsurat that represent rural areas, and Puskesmas Temanggung, as well as Puskesmas Dharmarini, which is the Urban Health Center. The sample in this study amounted to 31 villages and is divided into 11 villages in Puskesmas Pringsurat, 9 villages in Puskesmas Temanggung, and 11 villages in Puskesmas Dharmarini.

Observation of 31 MCH Handbook, the average of data completeness in MCH Handbook performed by midwives and Cadre is 45.29%. the lowest is 18,99% and the highest is 74.30%. Data completeness of each section in the MCH handbook, it can be seen in the table below

Table 1. Description Data Completeness each section in MCH Handbook

No	Section	% Data Completeness
1	Family Identity	70,20
2	Childbirth Welcoming	2,73
3	P4K Stickers	10,14
4	Maternal Health Notes	82,73
5	Maternal Maternity and Newborn Notes	24,69
6	Postpartum Maternal Health Notes	25,59
7	Description of Birth	44,65
8	Childhood Immunization Records	72,58
9	Health Outcomes Newborns Notes	25,20
10	Compliance Advice Nutrition and Feeding	6,45
11	Stimulation Detection of Early Intervention Growth (SDIDTK)	3,23
12	Children's Health Notes	5,65
13	Healthy Towards Card (KMS)	40,86

According to the table 1, it can be seen that the highest percentage on record completeness of maternal health Notes is 82.73%, the lowest completeness in Childbirth Welcoming section (2.73%). For 13 MCH Handbook section was observed, there are only 3 parts completeness above 50%, are Identity Family (70.2%), Maternal

Health Notes (82.73%), and Childhood Immunization Records (72.58%). Ten other parts percentage is less than 50%, so it could be concluded most of the items listed on the MCH Handbook incomplete. Here is described complete recording of section in the MCH handbook observed

Table 2. Description item Completeness in Maternal Health Notes Section

No.	Item	Unfilled	
		f	%
1.	First Day of Last Menstrual (HPHT)	1	3,2
2.	Estimated Delivery Day (HTP)	1	3,2
3.	Arm Circumference (MUAC)	10	32,3
4.	Height	9	29,0
5.	Contraception	10	32,3
6.	Hospital sheet	8	25,8
7.	History of allergy	10	32,3
8.	Number of pregnant	1	3,2
9.	Total deliveries	2	6,5
10.	Number of miscarriages	3	9,7
11.	Number of children living	11	35,5
12.	Number of stillbirths	11	35,5
13.	The number of children born preterm	12	38,7
14.	The distance to the last delivery	8	25,8
15.	TT	14	45,2
16.	Last birth attendant	15	48,4
17.	How the last delivery	13	41,9
18.	Date of inspection	2	6,5
19.	Complaints now	1	3,2
20.	Blood pressure	1	3,2
21.	Weight	1	3,2
22.	Gestation	1	3,2
23.	Fundus	1	3,2
24.	Location of the fetus	1	3,2
25.	Fetal heart rate / min	1	3,2
26.	Swollen foot	1	3,2
27.	Results of laboratory tests	5	16,1
28.	Action	1	3,2
29.	Counsel submitted	5	16,1
30.	Information	3	9,7
31.	When to return	3	9,7

According to the table 2, it is known that almost all the items in Maternal Health Notes

are completed. However, there are important items that is still lacking, such as The

distance to the last delivery (25.8%), MUAC (32.3 %), How the last delivery (58.1%) , TT

Immunization (45.2%) and Last Birth Attendant (48.2%).

Table 3. Description item Completeness in Childbirth Welcoming Section

No.	Item	Unfilled	
		f	%
1.	Mother's name	29	93,5
2.	Address	29	93,5
3.	Estimated month of birth	29	93,5
4.	Estimated birth year	29	93,5
5.	birth attendant	29	93,5
6.	Labor Finance	30	96,8
7.	Vehicle	31	100,0
8.	Family Planning Methods	31	100,0
9.	Blood donation	31	100,0
10.	The place, date deal	31	100,0
11.	Name and Signed Husband / parent / guardian	31	100,0
12.	The name and signed midwife / doctor	31	100,0
13.	Name and Signed mother	31	100,0

According to the table 3, it is known that almost all the items in Childbirth welcoming were uncompleted. According to the table 4,

it is known that almost all the items in P4K Sticker Section were uncompleted

Table 4. Description item Completeness in P4K Sticker Section

No.	Item	Unfilled	
		F	%
1.	Mother's name	27	87,1
2.	Estimated Birth	28	90,3
3.	Birth attendant	27	87,1
4.	Place of delivery	27	87,1
5.	Labor companion	28	90,3
6.	Transportation	29	93,5
7.	Prospective donors	29	93,5

Table 5. Description item Completeness in KMS Section

No.	Item	Unfilled	
		f	%
1.	Name of toddler	18	58,1
2.	Posyandu	29	93,5
3.	Date / month Birth	19	61,3
4.	Weighing date	5	16,1
5.	Weighing results	12	38,7
6.	Make a point of weighing results	5	16,1
7.	Make a line graph weighing results	15	48,4
8.	N / T	31	100,0
9.	Exclusive breastfeeding	31	100,0

Based on the table 5, it is known that the largest percentage of items in KMS filled is weighing date (83.9%) and made a point of weighing results (83.9%). While the largest percentage of unfilled is N / T (100.0%) and exclusive breastfeeding (100.0%).

## **Discussion**

Data on MCH Handbook should be a maternal and child health record that could be the basis of data for the surveillance of maternal and child health in the villages. Surveillance activities “Desa Siaga” in maternal and child health, should be able to use a database from MCH Handbook data. Because all data records of mother and baby are provided fill in the data in the MCH handbook since pregnant women to delivery up to 6 year olds <sup>5</sup>.

Incomplete data on MCH Handbook indicates there a lack understanding for surveillance and management of maternal and child health. Maternal Health Note, there are still many incomplete data like MUAC which it is important to determine the nutritional status of pregnant women, who may be at risk and babies born. Similarly, delivery distance data that can be used for screening high-risk pregnant women. This indicates that the data for risk screening pregnant women are still not considered important.

Data Filled in Childbirth Welcoming is still low when this data is used to determine the extent of the preparation of the capital to Childbirth welcoming so that things that are undesirable when the time of delivery can be avoided. <sup>5</sup> Data donations of blood on

Childbirth Welcoming helpful in case of complications during delivery and very need blood donations from other parties.<sup>5</sup> Charging data on P4K Stickers (Planning Labor and Prevention of Complications) shows the active role of families and communities in planning for safe delivery. The main benefit of stickers P4K is accelerate and improve the functioning of “Desa Siaga” coverage of antenatal care <sup>6</sup> Data companion labor and transport is essential filled because the data can be used for the readiness of mothers in childbirth later face. Delays in reaching the health service may cause risk of maternal death. <sup>7</sup>

Data Monitoring nutrition and feeding largely unfilled, although this data is important for conditions and health of the baby / toddler is increase and in case of malnutrition will be able to quickly handled. The intake food also function in maintaining good health, Recover health and daily activities day. <sup>8</sup> Incomplete data on this section show that the nutritional aspects have been overlooked in the service of pregnant women.

Stimulation Detection of Early Intervention Growth (SDIDTK) data largely unfilled, although this data is required to monitor child growth is conducted through stimulation, detection and early intervention developmental deviations from birth to age six. Early detection of developmental disorders is done by screening / checking a child's development, usability testing hearing and vision tests. Recording SDIDTK program should be made considering the importance of the program, and should have

been recorded in full in the MCH Handbook about SDIDTK. There is still a lack of completeness in the SDIDTK showed that the development of infants and toddlers is not a major concern in Child Surveillance especially in Nutritional Status. Actually if data in MCH Handbook are complete, It can more useful for strengthen for mother attend in health care services. MCH handbook is very important to encourage mothers in ANC service, so that with the increase in MCH handbook ownership in pregnant women, mothers will increase understanding of the importance of the ANC and improve the practice of ANC of pregnant women to health care, such as the results in Bangladesh <sup>9</sup>.

The results of the study by Keiko Osaki in Indonesia also shows that the MCH handbook encourages pregnant women to do the ANC in Health Care <sup>10</sup> ,. Studies in Mongolia, showed that the use of MCH Handbook improve the knowledge, care and service utilization ANC.<sup>11</sup>

## Conclusion

The average of data completeness in MCH Handbook was 45.29%. For 13 MCH Handbook section was observed, there are only 3 parts completeness above 50%, Ten other parts percentage is less than 50%. There are many data item that important to be data base for MCH and Nutrition Status Surveillance are incomplete.

There are many data that useful for screening high risk pregnant woman and nutrition growth are incomplete. Incomplete data in MCH data shown that data is not be urgent in MCH Services. Data in MCH Handbook couldn't be database for MCH Surveillance in "Desa Siaga " Program.

Recommendation for Village Midwife and Cadre should increase completeness of MCH data in MCH Handbook.

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